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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/12/2003

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EXAMINER

TSAI, TSUNG YIN

ART UNIT

PAPER NUMBER

2624

NOTIFICATION DATE

DELIVERY MODE

03/18/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/733,264	Applicant(s) HOSHUYAMA, HIDEO	
	Examiner TSUNG-YIN TSAI	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment submitted on 12/17/2009 amended claims 1, 6 and 9, and cancel claim 8.

Information Disclosure Statement

1. No new IDS were submitted.

Response to Arguments

2. Applicant's arguments filed 12/17/2009 have been fully considered but they are not persuasive.

- Applicant argues prior art do not teach amended claim language.

Examiner respectfully disagree. Upon further examination Chen teaches the newly amended claim language regarding luminance value, the use of weighting and distance for the evaluation value especially in columns 11-12. Please view the rejection below for further details.

35 USC 103 – Claim Rejection

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US 6,487,309 B1) in view of Hirai et al (US 2001/0003557 A1).

(1) Regarding claim 1, similarly to claims 6 and 9:

Chen teach the following:

- an image information generating part for dividing an-captured image data consisting of a signal having a plurality of data values of a plurality of pixels into a plurality of small areas, said small areas each consisting of a plurality of the pixels, and for generating, for each of said small areas, image information indicating a characteristic of the captured image data

[figure 4, especially part S4 (divide image data to areas) and S6-S8

(information process from the areas) and column 10 lines 20-60];

- an image-processing part for performing correction ~~an image processing~~ on each of the pixels of the captured image data according to the evaluation value determined by said evaluation value determining part ~~for a small area to which a pixel belongs and the evaluation value determined for small areas adjacent to the~~ small area

[figure 4, especially S12 (interpolation is seen as image processing); figure 4, especially S6-S8 (seen as evaluation of the area); figure 3 (areas are overlapping) and column 11 lines 5-40 (control unit for decision making of color average ratio to within specific range, this is seen as correction)].

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- an evaluation value determining part for calculating an evaluation value for each of the plurality of pixels, the evaluation value being calculated by selecting the small areas having shorter distances to a pixel for each of the pixels

[column 11 lines 1-10 (decision of color components in very close to one another among the individual color components in the area)], and

- calculating the evaluation value for each pixel by weighing the respective luminance values of the selected small areas in accordance with the distance from each pixel to the small areas selected for each pixel

[column 11 lines 1-10 and column 11 line 55 to column 12 line 55, especially column 12 lines 15-20 (weighting factors by distance)].

Chen does not teach:

- ~~an evaluation~~-a luminance value determining part for determining-~~an evaluation~~ a luminance value indicating luminosity for each of the plurality of small areas.

However, Hirai et al teaches:

- ~~an evaluation~~-a luminance value determining part for determining-an evahmt4on a luminance value indicating luminosity for each of the plurality of small areas.

[Figure 4 (plurality of small areas) and paragraph 0044 (sensor of the area provides luminosity data)].

It would have been obvious to one skill in the art at the time of the invention to modify Chen with Hirai et al regarding evaluation of the luminosity of areas of interest in order to detect appropriate exposure values for brightness of the object as a whole and the condition of the object to be photographed is determined as disclose by Hirai et al on paragraph 0063.

(2) Regarding claim 2:

Chen further teaches:

- captured image data (**figure 4 and column 10 lines 20-60**).

Hirai et al further teaches:

- wherein said image-processing part includes a luminance level correcting part for correcting a luminance level

[paragraph 0049 (based on brightness value compensation calculation procedure is executed and paragraph 0050)]; and

- said luminance level correcting part determines a luminance level correcting coefficient used for the luminance level correction according to the evaluation value for each of said pixels determined by said evaluation value determining part so as to perform the luminance level correction processing on each of said pixels by using the coefficient

[paragraph 0050 (base on brightness value Bvd which is seen as coefficient) and paragraph 0051 (base on Bvd and Lvd colorimetry procedure executed and calorimetric compensation value is calculated is seen as correction processing)].

(3) Regarding claim 4:

Chen further teaches:

- wherein said evaluation value determining part performs a pre-correction processing on the image information for each of said small areas generated by said image information generating part in accordance with a characteristic of a photo-taking lens used for generating the captured image data, and then determines the evaluation value according to the pre-corrected image information for each of said small areas

[figure 1 and column 4 lines 50-60 (preprocessing unit connected with lens drive unit) and column 5 lines 60-67 (lens drive unit perform AF and AE and white balance processing are all seen as preprocessing correction on image information capture)].

(4) Regarding claim 5:

Chen further teaches:

- said evaluation value determining part determines the evaluation value by weighting the image information for each of said small areas in accordance with a ratio of distances from a pixel as a subject for the evaluation-value

determination to a predetermined point in each of said small areas whose image information is to be referred to for the evaluation-value determination

[column 11 lines 55 to column 12 lines 30 (weighting consideration for quantity for a pixel by weighting factors such as distance, discloses especially on column 12 lines 15-30)].

(5) Regarding claim 7:

Hirai et al further teaches:

- a divisional photometry part for dividing a subject field into a plurality of photometry areas and performing photometry for each of the photometry areas, wherein said image information generating part generates the image information based on information obtained from said divisional photometry part

[figure 4B (show of division of subject field into plurality of areas) and paragraph 0044 (generated information of the fields area are outputted such as color and luminance)].

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US 6,487,309 B1) and Hirai et al (US 2001/0003557 A1) in view of Marimon et al (US 5,710,877).

(1) Regarding claim 3:

Chen and Hirai et al teaches all the limitation above in claim 1.

Chen and Hirai et al does not teach the following.

- said evaluation value determining part performs a smoothing processing on the image information for each of said small areas generated by said image information generating part and determines the evaluation value according to the smoothed image information for each of the said small areas.

However Marimon et al teaches the following:

- said evaluation value determining part performs a smoothing processing on the image information for each of said small areas generated by said image information generating part and determines the evaluation value according to the smoothed image information for each of the said small areas

[column 10 line 10-20 (processing of smoothly over the area and a signal property descriptor of the regions) and column 35 lines 25-35 (segmentation of data and smoothing)].

It would have been obvious to one skill in the art at the time of the invention to modify Marimon et al with Chen and Hirai et al regarding division of image data and smoothing such for providing efficient spatially indexing into an original image as discloses by Marimon et al in column 36 lines 5-10.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TSUNG-YIN TSAI whose telephone number is (571)270-1671. The examiner can normally be reached on Monday - Friday 8 am - 5 pm ESP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571)272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tsung-Yin Tsai/
Examiner, Art Unit 2624
March 12, 2010

/Vu Le/
Supervisory Patent Examiner, Art Unit 2624